IN THE CLAIMS:

Please amend claims 1-2, 6, 10, and 12 as follows:

1. (Currently Amended) A phase compensation method which uses a phase plate to compensate for an optical phase of a reproduced signal in a reproducing optical system which is provided with respect to the reproduced signal from an optical recording medium, comprising the steps of:

recognizing a type of the optical recording medium; and

controlling a position of the phase plate to an arbitrary inclination angle within a predetermined variable range depending on whether a track of the medium is a land or a groove, the arbitrary inclination angle differing depending on the type of the optical recording medium, so that a carrier-to-noise ratio of a reproduced signal from a track which is being reproduced becomes a maximum or, a DC fluctuation of the reproduced signal becomes a minimum or, a crosstalk level from tracks adjacent to the track which is being reproduced becomes a minimum.

2. (Currently Amended) A phase compensation method which uses a phase plate to compensate for an optical phase of a reproduced signal in a reproducing optical system which is provided with respect to the reproduced signal from an optical recording medium, comprising the steps of:

(a) detecting a position of the phase plate where a carrier-to-noise ratio of a reproduced signal from a track which is being reproduced becomes a maximum or, a DC fluctuation of the reproduced signal becomes a minimum or, a crosstalk level from tracks adjacent to the track which is being reproduced becomes a minimum;

(b) storing control data related to the position of the phase plate depending on whether the track is a land or a groove, the position of the phase plate differing depending on a type of the optical recording medium; and

(c) controlling the position of the phase plate to an arbitrary inclination angle within a predetermined variable range based on the control data.

3. (Original) The phase compensation method as claimed in claim 2, further comprising the step of:

(d) recognizing the type of the optical recording medium.

4. (Original) The phase compensation method as claimed in claim 3, further comprising the step of:

(e) obtaining the control data at a time of loading the optical recording medium.

5. (Original) The phase compensation method as claimed in claim 2, further comprising the step of:

(d) obtaining the control data at a time of loading the optical recording medium.

6. (Currently Amended) An optical storage apparatus comprising:

a phase plate configured to compensate for an optical phase of a reproduced signal from an optical recording medium;

a detector configured to detect a position of the phase plate;

a varying unit configured to vary the position of the phase plate; and

a control unit configured to control the position of the phase plate to an arbitrary inclination angle within a predetermined variable range depending on whether a track of the medium is a land or a groove, the arbitrary inclination angle differing depending on a type of the optical recording medium, so that a carrier-to-noise ratio of a reproduced signal from a track which is being reproduced becomes a maximum or, a DC fluctuation of the reproduced signal becomes a minimum or, a crosstalk level from tracks adjacent to the track which is being reproduced becomes a minimum.

7. (Previously Presented) The optical storage apparatus as claimed in claim 6, further comprising:

a memory configured to store control data related to the position of the phase plate where the carrier-to-noise ratio of the reproduced signal from the track which is being reproduced becomes the maximum or, the DC fluctuation of the reproduced signal becomes the minimum or, the crosstalk level from the tracks adjacent to the track which is being reproduced becomes the minimum,

said control unit controlling the varying unit based on the control data stored in the memory.

8. (Original) The optical storage apparatus as claimed in claim 7, wherein said memory stores control data within one track or, within a plurality of tracks or, within one zone of the optical recording medium.

9. (Previously Presented) The optical storage apparatus as claimed in claim 6, further comprising:

a recognizing unit configured to recognize the type of the optical recording medium.

10. (Currently Amended) ~~The~~ An optical storage apparatus ~~as claimed in claim 6, further~~ comprising:

a phase plate configured to compensate for an optical phase of a reproduced signal from an optical recording medium;

a detector configured to detect a position of the phase plate;

a varying unit configured to vary the position of the phase plate;

a control unit configured to control the position of the phase plate to an arbitrary inclination angle within a predetermined variable range depending on a type of the optical recording medium, so that a carrier-to-noise ratio of a reproduced signal from a track which is being reproduced becomes a maximum or, a DC fluctuation of the reproduced signal becomes a minimum or, a crosstalk level from tracks adjacent to the track which is being reproduced becomes a minimum; and

another phase plate which is fixed within the optical storage apparatus.

11. (Previously Presented) The optical storage apparatus as claimed in claim 6, further comprising:

means for obtaining control data when loading the optical recording medium into the optical storage apparatus,

said control unit controlling the varying unit based on the control data.

12. (New) An optical storage apparatus comprising:

a first phase plate configured to compensate for an optical phase of a reproduced signal from an optical recording medium;

a second phase plate which is fixed within the optical storage apparatus;

a detector configured to detect a position of the first phase plate;

a varying unit configured to vary the position of the first phase plate; and

a control unit configured to control the position of the first phase plate within a predetermined variable range depending on a type of the optical recording medium, so that a carrier-to-noise ratio of a reproduced signal from a track which is being reproduced becomes a maximum or, a DC fluctuation of the reproduced signal becomes a minimum or, a crosstalk level from tracks adjacent to the track which is being reproduced becomes a minimum.